

SCHOONER IN THE SAND

Note to teachers: This supplement includes a discussion guide, lessons and Michigan Content Standards to use with the Michigan Time Traveler page. You may reproduce the pages in this supplement to use with students. Follow the Time Traveler link on the Michigan Historical Center's Teacher's Stuff page to the on-line version of this Teacher's Guide for a glossary of terms, a Great Lakes time line and on-line resources:
<http://www.sos.state.mi.us/history/museum/techstuff/>.

DISCUSSION GUIDE

(SOC 1.3. *Analyze and Interpret the Past*; SOC.1.1. *Time and Chronology*; ELA 3. *Meaning and Communication in Context*)

- **The Discovery.** Find Naubinway in the Upper Peninsula on a map of Michigan. Why didn't people believe that David had found a ship? What had to be removed before archaeologists could investigate the wreck? Why was the wreck covered up again?
- **What's a Schooner?** Why were ships an important means of transportation in the 1830s? How were schooners and other kinds of ships used. Describe the appearance of a schooner.
- **When Was the Wreck?—Clues.** How did each of these help determine the date of the ship: a label on a tea chest, a name on a barrel of salt? What did the schooner carry in barrels?
- **Schooners in History.** The *Amistad* was not much larger than the 62-foot "Schooner in the Sand." Find out more about its importance in the history of slavery in America. What other ship also was wrecked near Naubinway? What was its cargo? What kinds of ships replaced schooners on the Great Lakes?

ACTIVITY ONE: Ship's Rigging

(SOC 1.3. *Analyze and Interpret the Past*; ELA 1. *Meaning and Communication: Reading*; ELA 3. *Meaning and Communication in Context*)

Sailing vessels are classified by their rigging. "Ship," "schooner," and "barque" are really abbreviations for "ship-rigged," "schooner-rigged" and "barque-rigged." The rigging includes the lines and chains used aboard a vessel for raising and lowering sails and supporting masts and spars. Fore-and-aft rigged sails take the wind from either side, making it possible for the vessel to sail into the wind. The sails on square-rigged vessels (like Christopher Columbus's) always take the wind on the same side of the sail.

Schooners have two or more fore-and-aft rigged masts. (The schooner with the most masts was the *Thomas W. Lawson*, built with seven masts in 1902 for ocean travel. It carried 25 sails.) Make copies of the picture of the artist's interpretation of the "Schooner in the Sand" (page 3). Discuss the rigging of the ship as labeled on the drawing.

Ask groups of 2-3 students to each research two of the following vessels at the library and/or on the Web: sloop, full-rigged brig, brigantine or hermaphrodite brig, topsail schooner, schooner, barque (also, bark), barkentine (also, barquentine), canaller, full-rigged ship, cutter, yawl. After completing their research, students should make a drawing of each researched vessel and use the drawings to describe the differences and similarities between the vessels in a report to the rest of the class.

ACTIVITY TWO: Consequences of a Shipwreck

(SOC 1.3. Analyze and Interpret the Past; SOC II.4. Regions, Patterns and Processes; ELA 10. Ideas in Action; Arts 2. Creating)

In 1925 *Michigan History* magazine published “Early Days Around Alpena” by Arthur Scott White. Copy the excerpt from the article (page 4) for each student. After completing the Time Traveler page discussion questions, introduce this topic by asking students to name possible consequences of a ship not reaching its port with the goods it carried. Locate Devil River (near Ossineke in Sanborn Township, south of Alpena) on a Michigan or Alpena County map. Locate Saginaw Bay and Detroit on a Michigan map. Explain that the short story tells about a ship that left Detroit and sailed toward a small lumbering camp that existed in the early 1850s at the mouth of the Devil River (site of today’s Ossineke). Trace its probable route. Distribute the copies and ask students to read the story. Discuss the following questions.

- Why would the ship have been carrying cattle? (beef for the lumber camp) What happened to the cattle? (pushed overboard) Why? (to lighten load; also, cattle would have been injured or damaged the ship further by being tossed about in storm)
- Did the ship reach the camp with the winter supplies? (no) How far did it get? (towed to Saginaw River)
- What did the people in the camp eat during the winter? (cranberries, fish, bear, meat from two cattle killed by a falling tree)
- What is scurvy? (a disease caused by a lack of vitamin C. People with scurvy develop spongy gums, loose teeth, and bleed into the skin and mucous membranes.) How do we prevent scurvy today? (abundance of fresh fruit and vitamin C substitutes)
- **Food shortages today.** Use newspapers and/or the Web to find examples of places in the world today that do not have sufficient food supplies. The United Nations reported this for the following nations in 2001.

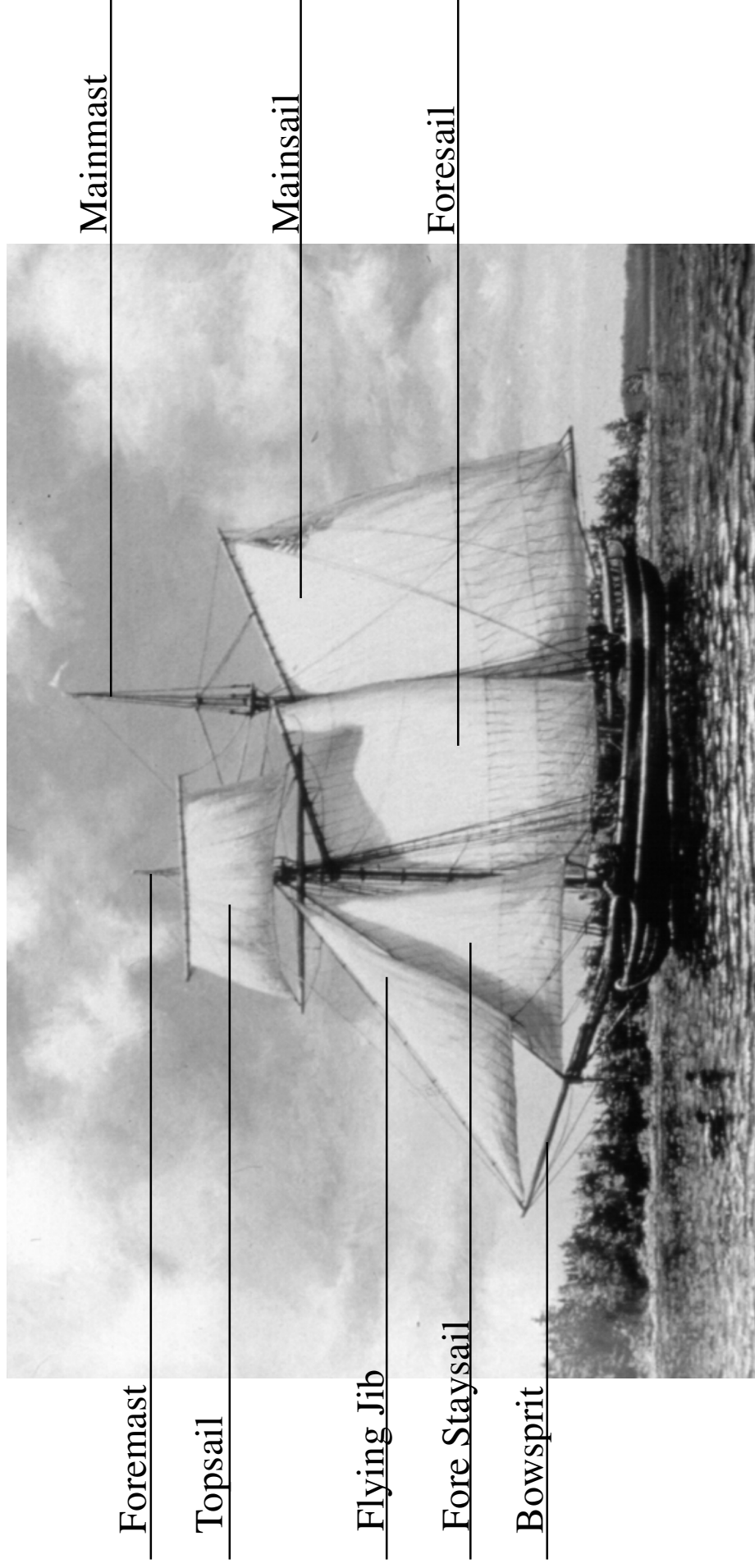
NATION	CAUSE
Afghanistan	drought, freezing temperatures, reduced harvests, war
Iraq and Jordan	drought
Eritrea, Ethiopia, Kenya and the Sudan	drought and civil wars
Malawi, Mozambique, Zambia and Zimbabwe	floods
Democratic Republic of the Congo	political insecurity hampers food distribution
Burundi and Rwanda	drought
Chad and parts of Burkina Faso	reduced harvests
Mongolia	droughts and extremely cold winters that killed large numbers of livestock
North Korea	severely cold winter and reduced harvests
Armenia, Georgia and Tajikistan	drought
El Salvador	earthquakes
Yugoslavia and the Russian Federation	war and large numbers of refugees and displaced people

(Further information: “The State of Food and Agriculture 2001,” Food and Agriculture Organization of The United Nations, Rome, 2001, United Nations FAO. <http://www.fao.org/docrep/003/x9800e/x9800e00.htm>.)

Discuss the main reasons for food shortages in these countries? (Weather—drought, abnormally cold winters, earthquakes—hurts harvests; war ruins crops, kills livestock, or makes fields unusable due to land mines; and political unrest creates large numbers of refugees or persons from war-torn areas entering a country or prohibits aid from the United Nations or other countries from being delivered.) Ask students to make a poster for one of the nations that illustrates (1) its food problems and (2) their causes and (3) includes a slogan, plea or reason that others should help.

The “Schooner in the Sand”

Rigging



From the painting by Peter Rindlisbacher.

Early Days Around Alpena

By Arthur Scott White
Grand Rapids

Lumberman David D. Oliver purchased a sawmill along the Devil River, south of Alpena, on Lake Huron (today's Ossineke). He set up a lumber camp there with his family and employees. He purchased winter food supplies for the families in Detroit. One of Oliver's two schooners, the *Sparrow*, was to deliver the supplies to the small community. Here Arthur Scott White, stepson of John W. Paxton—the schooner's captain—tells about that schooner's trip.

During the month of October 1853 Paxton, accompanied by an employee and myself, spent a week . . . gathering cranberries. . . . The cranberries so obtained proved of inestimable value to the little community at the mouth of the Devil River during the winter of 1854 in combating scurvy and intestinal disturbances. Oliver had not considered it worthwhile to produce the vegetables needed by his employees, but purchased food supplies of every nature in Detroit to be delivered to the community by the *Sparrow*.

Late in the month of November 1853 the *Sparrow*, loaded with the winter supply of food for the Oliver settlement, was caught in a terrible storm on Saginaw Bay, which lasted several days. While the store was raging fiercely Paxton and his men pushed a lot of cattle overboard from the deck of the *Sparrow*. The poor beasts swam about helplessly before sinking under the waves. Her sails were blown away and the boat tossed about like a cork on a violent sea, but was finally rescued by a passing steamboat and towed to the Saginaw River where she remained until May 1854, when new sails enabled the skipper to clear port.

The cutting of timber was carried on in the woods, but the failure to receive the food and supplies needed by the Olivet community, on account of the disaster sustained by the *Sparrow*, hampered the workmen. Fish, speared or caught with hooks through holes cut in the ice, and occasionally a deer or bear killed in the woods, served to sustain life.

A yoke of cattle used in hauling logs to the stream was caught under a falling tree and killed instantly. The bodies were skinned and hung under a wing of the sawmill to be preserved by freezing. As spring approached, the shortage of food was so great that the people eagerly accepted portions of the meat.

SOURCE: *Michigan History*, Vol. 9, No. 3 (1925), pp. 357-361. Edited.

Glossary of Terms

You will find these terms useful to know as you read the January 9, 2002, “Schooner in the Sand” Time Traveler page and when you visit the *Schooner in the Sand: Unlocking the Secrets of a Great Lakes Shipwreck* exhibit at the Michigan Historical Museum (January 12 through August 18, 2002).

Barque (bark)—A vessel with three or more masts. The farthest aft mast (mizzenmast) is fore-and-aft rigged, and the other masts are square-rigged.

Barquentine (barkentine)—A vessel similar to a barque with the mainmast fore-and-aft rigged

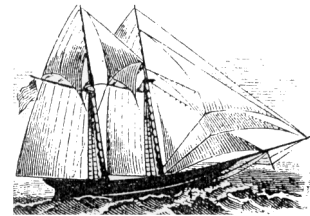
Bowsprit—A large spar projecting forward from the stem of a ship. It provides support for the foremast and jibs, which are attached to it.

Brig—A full-rigged brig is a vessel with two square-rigged masts (fore and main).

Brigantine—A two-masted vessel that is square-rigged except for a fore-and-aft rigged mainsail.

Canaller—A Great Lakes sailing vessel with its hull built so that it would fit through the locks of canals (especially, the Welland Canal). Its width was determined by the size of the canals. Both its bow and stern were generally squared rather than pointed. Its sides were straight, and its bottom was usually flat.

Fore-and-aft rigged—A vessel with sails that run fore and aft (versus from side to side across the ship) and can take the wind from either side of the sail, depending upon the direction of the wind. The schooner illustrated at the right is a fore-and-aft rigged vessel.



Jib—A triangular sail set on a stay extending usually from the head of the foremast to the bowsprit or jib boom

Mast—Tall, vertical pole of timber or metal to which the yards, sails and rigging are fastened

Rigging—The lines and chains used aboard a ship, especially in working sail and supporting masts and spars

Shipwreck/wreck—The destruction of a ship, as by a storm or a collision; the remains of a wrecked ship

Schooner—A vessel with two or more fore-and-aft rigged masts. See illustration above.

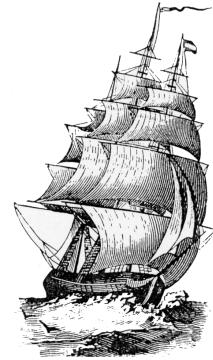
Scow schooner—A vessel rigged as a schooner (fore-and-aft), but with a shallow draft and flat bottom. It was a working vessel for industries that required transportation of bulk shipments such as lumber or sand from shallow harbors.

Sloop—A small fore-and-aft rigged vessel with one mast, a mainsail and one or more jibs

Steamer, steamship—Vessel propelled by a steam engine

- Sidewheel steamer, sidewheeler—A steamer with a paddle wheel on each side. The *Ontario* and the *Fontenac*, built in 1817, were the first sidewheelers on the Great Lakes. They were most popular during the middle of the 19th century , but some were still in service on the lakes until the 1940s.
- Propeller, screw steamer—A steamer with a screw-drive propeller mounted in the stern. The *Vandalia*, built in 1841, was the first propeller steamship on the Great Lakes.

Square-rigged—A vessel with sails that run athwartships (from side to side) and always take with wind on the same side of the sail. See drawing at right. Some square-rigged vessels also have staysails that are fore-and-aft rigged.



Great Lakes Maritime Time Line

1813	American Commodore Oliver Hazard Perry defeats the British in the Battle of Lake Erie during the War of 1812. Perry's victory message to General William Henry Harrison read, "We have met the enemy and they are ours, two ships, two brigs, one schooner and one sloop." The war also sees naval battles on Lake Ontario and Lake Champlain.
1818	The first steamship on the upper Great Lakes, the <i>Walk-in-the-Water</i> , is launched at Buffalo, NY, and arrives in Detroit on August 22. It is wrecked in 1821.
1819	The light at Presque Isle, on Lake Erie, may be the first lighthouse on the Great Lakes. (Early lighthouse records were lost in a fire.)
1829	The Welland Canal is constructed to link Lake Ontario with Lake Erie and let ships safely pass Niagara Falls.
1841	The Vandalia, built with Ericsson propellers at Oswego, NY, is the first screw-driven steamship (versus paddle-driven side-wheeler) on the Great Lakes.
1855	The Sault Canal (Soo Locks) at Sault Ste. Marie opens, making it possible for ships to navigate the 22-foot difference between Lake Superior and the lower lakes.
1866	There are 72 lighthouses guiding ships to safety on the Great Lakes.
1870-1871	An especially harsh winter on the lakes causes more than 214 deaths in maritime-related accidents.
1876	The U. S. Government establishes 11 lifesaving stations on Lakes Ontario, Erie and Huron. It adds stations on Lakes Michigan and Superior the following year.
1878	The U. S. Life-Saving Service is formally organized.
1880s-1890s	Wayne County shipbuilders build more ships than any other area in the country, and the tonnage (carrying capacity) of ships built at Bay County shipyards exceeds that of the ships built in Wayne. Shipyards at Bay City, Detroit and Grand Haven build 65 ships in 1890. Many Michigan companies, such as P. F. Olds and Son, Lansing, build marine engines. (<i>Michigan and Its Resources</i> (Jochim, 1893))
1905	The "Mataafa Blow," a storm on Lake Superior on November 28, wrecks 30 ships and drives 14 steel carriers ashore.

1913	During the Great Storm of November 9 on Lake Huron, nineteen ships are lost and 244 sailors die.
1915	The Life-Saving Service and Revenue Cutter service are combined to form the U. S. Coast Guard.
1916	The "Black Friday" storm on Lake Erie, October 20, sinks a steamer, a lumber hooker, a whaleback freighter and a schooner and kills 49 sailors.
1920-1934	The U. S. Coast Guard battles bootleggers who attempt to bring liquor from Canada to the U. S. during the years of Prohibition.
1939	The Lighthouse Service becomes part of the U. S. Coast Guard.
1940	The "Armistice Day Storm" of November 11, claims 5 vessels and 66 lives.
1944	The U.S. Coast Guard ice-breaker <i>Mackinaw</i> is stationed at its home port of Cheboygan, Michigan
1959	The St. Lawrence Seaway opens, admitting large ocean-going vessels to ports on the Great Lakes.
1960s	After lifesaving, ice-breaking becomes the next most important duty of the U. S. Coast Guard. the goal is to keep shipping lanes open as long as possible during Great Lakes winters.
1967	The U. S. Coast Guard is made part of the new U. S. Department of Transportation.
1975	The <i>Edmund Fitzgerald</i> sinks on November 10 with a loss of all 49 crew members.

Schooner in the Sand

Selected Resources for the Michigan Time Traveler Page

Books about Schooners

Haley, Neale. *The Schooner Era: A Lost Epic in History*. South Brunswick and NY: A. S. Barnes and Company, 1972.

Hirthe, Walter M. and Mary K. Hirthe. *Schooner Days in Door County*. Minneapolis, MN: Voyageur Press, 1986.

Karamanski, Theodore J. *Schooner Passage: Sailing Ships and the Lake Michigan Frontier*. Detroit: Wayne State University Press, 2000.

Kristiansen, Soren. *Diary of Captain Soren Kristiansen, Lake Michigan Schooner Captain, 1891-1893*. Iron Mountain, MI: Mid-Peninsula Library Cooperative, 1981.

Townsend, Robert B. *Tales from the Great Lakes: Based on C. H. J. Snider's "Schooner Days."* Toronto, ON: Dundurn Press, 1995.

Maritime History Web Sites — Mostly Great Lakes

Christmas Tree Ship

<http://www.christmastreeship.homestead.com/index.html>

The David Swayze Great Lakes Shipwreck File

<http://www.ghost-ships.org/swayzedb.asp>

Great Lakes and Seaway Shipping

<http://www.oakland.edu/boatnerd/>

Great Lakes Industrial History Center at the Cleveland Digital Library

<http://web.ulib.csuohio.edu/SpecColl/glihc/>

Great Lakes Museums and Historic Vessels

<http://www.oakland.edu/boatnerd/museums/>

HAMILTON HARBOUR 1826 – 1901 by Ivan S. Brookes. A transcription for the Maritime History of the Great Lakes by Walter Lewis

<http://www.hhpl.on.ca/GreatLakes/Documents/Brookes/default.asp>

Historical Collections of the Great Lakes, Bowling Green State University, Great Lakes Vessels Online Image Database

<http://www.bgsu.edu/colleges/library/hcgl/vessel.html>

History and Development of Great Lakes Water Craft, Minnesota Historical Society

<http://www.mnhs.org/places/nationalregister/shipwrecks/mpdf/mpdf2.html>

Life Along the Manitou Passage: The Age of Schooners

<http://www.schoolship.org/maritime/>

Loudon S. Wilson's Great Lakes Directory of Commercial Sail

<http://www.ghost-ships.org/wilsondb.asp>

Maritime History of the Great Lakes
<http://www.hhpl.on.ca/GreatLakes/>

Rigging of American Sailing Vessels, Peabody Essex Museum, Salem, MA
<http://www.pem.org/archives/guides/rigs.htm>

The Soo Locks, U. S. Army Corps of Engineers, Detroit District
<http://huron.lre.usace.army.mil/SOO/soohmpg.html>

Teacher's Lighthouse Resource for Grades K-4, U.S. Coast Guard
http://www.uscg.mil/hq/g-cp/history/WEBLIGHTHOUSES/lighthouse_curriculum.html

Turn-of-the-Century America ~ Detroit Publishing Company ~ Photographs ~ 1880-1920
(Search collection using keywords such as "schooner" or "ship" or "Michigan.")
<http://memory.loc.gov/ammem/detroit/dethome.html>

U. S. Coast Guard Historian's Office
<http://www.uscg.mil/hq/g-cp/history/collect.html>
The Coast Guard and the Great Lakes
http://www.uscg.mil/hq/g-cp/history/h_greatlakes.html

Wisconsin Marine Historical Society
<http://www.execpc.com/~wmhs/>

Wisconsin Maritime Museum
<http://www.wimaritimemuseum.org/>

The Amistad Incident

Jurmain, Suzanne. *Freedom's Sons: The True Story of the Amistad Mutiny*. NY: Lothrop Lee & Shepard, 1998. Ages 9-12.

Owens, William A. *Black Muntiny: The Revolt on the Schooner Amistad*. NY: Plume, 1997. Adult

Amistad America
<http://www.amistadamerica.org/new/main/html/index-intro.html>

Exploring Amistad at Mystic Seaport
<http://amistad.mysticseaport.org/main/welcome.html>

ERRATUM:

The Michigan Time Traveler page for January 9, 2002, includes a photo of David Head, the boy who discovered the “Schooner in the Sand.” Although he is correctly identified as David Head in the text above the photo, the photo caption reads “Discoverer David Ward.” It should be “Discoverer David Head.”